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UNIVERSITY OF HAWAII
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"Phase B Studies of the High Resolution Camera on the Advanced X-ray Astrophysics Facility"

FINAL TECHNICAL REPORT

J. Patrick Henry, Principal Investigator

(NASA-CR-193629) PHASE B STUDIES OF THE HIGH RESOLUTION CAMERA ON THE ADVANCED X RAY ASTROPHYSICS FACILITY Final Technical Report (Hawaii Univ.) 2 p

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Unclas

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The University of Hawaii supported conceptual design studies of the High Resolution Camera (HRC) for the Advanced X-ray Astrophysics Facility (AXAF). We concentrated on the design of the UV/Ion shield which is in front of the microchannel plate detector. A series of shield were calculated. The most difficult constraint was maximizing the very low energy transmission (E~0.1 keV) while still maintaining the desired UV rejection properties. We concluded that it is impossible to obtain the transmission requested by the LETGS investigators while still maintaining adequate UV rejection. Based on these considerations, and others, the AXAF Readiness Review recommended that an additional HRC be flown. The new unit will be the primary readout of the LETGS while the original unit will be the primary imaging detector for the HRC.

We also supported a few laboratory studies at SAO and participated with various conferences and meeting with the HRC PI as requested.